WHAT IS CLAIMED IS:

1. A data communication method in a data communication system in which a controller and a controlled device controlled by the controller perform data communication via a communication channel, comprising the steps of:

    storing driver software of a plurality of types in a first storage area of the controlled device;

    judging whether driver software suitable for the controller has been stored in the first storage area of the controlled device;

    reading driver software suitable for the controller out of the first storage area in response to a judgement to the effect that driver software suitable for the controller has been stored in the first storage area;

    transmitting data, which represents the driver software that has been read out, from the controlled device to the controller; and

    storing the transmitted data representing driver software in a prescribed second storage area of the controller.

2. A method of controlling storage of driver software in a controller constituting a data communication system in which the controller and a controlled device controlled by the controller perform data communication via a communication channel, comprising the steps of:

    judging whether driver software suitable for the controller has been stored in a first storage area of the controlled device;

reading driver software suitable for the controller out of the first storage area in response to a judgement to the effect that the driver software has been stored in the first storage area;

5   transmitting data, which represents the driver software that has been read out, from the controlled device to the controller; and

storing the transmitted data representing driver software in a prescribed second storage area of the

10   controller.

3. The method according to claim 2, further comprising the steps of:

judging whether driver software suitable for the controller has not been stored in the controller; and

15   judging, in response to a judgement to the effect that the driver software has not been stored in the controller, whether driver software suitable for the controller has been stored in the first storage area of the controlled device.

20   4. The method according to claim 2, wherein in response to a judgement to the effect that driver software suitable for the controller has not been stored in the first storage area of the controlled device, information relating to this judgement is communicated.

25   5. The method according to claim 2, wherein the communication channel is a cable in accordance with IEEE 1394, and the data representing the driver software is transmitted in accordance with IEEE 1394.

6. The method according to claim 2, wherein the controlled device is a digital video camera or a printer.

7. A method of reading out driver software in a controlled device constituting a data communication system in which a controller and the controlled device controlled by the controller perform data communication via a communication channel, the controlled device being provided with a memory, said method comprising the steps of:

    storing driver software of a plurality of types in a storage area of the memory so as to be capable of being read out under the control of the controller; and

    reading out desired driver software based upon control performed by said controller.

8. The method according to claim 7, wherein the driver software is stored in the storage area of the memory so as to be rewritable.

9. The method according to claim 7, wherein an address of driver software that has been stored in the storage area of the memory and information relating to the controller capable of performing control using this driver software are stored so as to be capable of being read out.

10. The method according to claim 7, wherein the controlled device is a digital video camera or a printer.

11. A data communication system in which a controller

and a controlled device controlled by the controller

perform data communication via a communication channel,

wherein the controlled device is provided with a first

memory capable of storing driver software of a plurality

5   of types, and the controller comprises:

        a second memory for storing driver software;

        a judgement device for judging whether driver

software suitable for the controller has been stored in

a prescribed first storage area of said first memory

10   provided in said controlled device;

        a readout device for reading driver software

suitable for the controller out of the first storage

area in response to a judgement by said judgement device

to the effect that driver software suitable for the

15   controller has been stored in the first storage area;

        a transmission control device for transmitting

data, which represents the driver software that has been

read out by said readout control device, from the

controlled device to the controller; and

20   a storage control device for receiving the data

representing the driver software transmitted by said

transmission control device, and storing this data in a

second storage area of said second memory.

        12. A controller of a controlled device, the controller

25   constituting a data communication system in which the

controller and the controlled device controlled by the

controller perform data communication via a

communication channel, comprising:

a memory for storing driver software;

a first judgement device for judging whether driver software suitable for the controller has been stored in a prescribed first storage area of the controlled

5 device;

a readout control device, responsive to a judgement by said first judgement device to the effect that driver software suitable for the controller has been stored in the first storage area, for reading the driver software

10 out of the first storage area; and

a storage control device for storing, in a prescribed second storage area of said memory, data representing the driver software transmitted from the controlled device based upon transmission control by

15 said transmission control device.

13. The controller according to claim 12, further comprising second judgement device for judging whether driver software suitable for the controller has not been stored in the second storage area of said memory;

20 said first judgement device responding to a judgement by said second judgement device to the effect that the driver software has not been stored in the second storage area by judging whether driver software suitable for the controller has been stored in the first

25 storage area of the controlled device.

14. The controller according to claim 12, further comprising a notification device, responsive to a judgement to the effect that driver software suitable

for the controller has not been stored in the first

storage area of the controlled device, for communicating

information relating to this judgement.

15. The controller according to claim 12, wherein the

5   communication channel is a cable in accordance with IEEE

1394, and the data representing the driver software is

transmitted in accordance with IEEE 1394.

16. The controller according to claim 13, wherein the

controlled device is a digital video camera or a

10   printer.

17. A controlled device constituting a data

communication system in which a controller and the

controlled device controlled by the controller perform

data communication via a communication channel, said

15   controlled device having a memory in which driver

software is capable of being stored in a storage area,

wherein driver software of a plurality of types is

stored in the storage area of said memory so as to be

capable of being read out based upon control by said

20   controller.

18. The device according to claim 17, wherein the

driver software is stored in the storage area of said

first memory so as to be rewritable.

19. The device according to claim 17, wherein an

25   address of driver software that has been stored in the

storage area of said memory and information relating to

the controller capable of performing control using this

driver software are stored so as to be capable of being

read out.

20. A digital video camera constituting a data
communication system in which a camera controller and
the digital video camera controlled by the camera
5   controller perform data communication via a
communication channel, said digital video camera having
a memory in which driver software is capable of being
stored in a storage area, wherein driver software of a
plurality of types is stored in the storage area of said
10   memory so as to be capable of being read out based upon
control by said camera controller.

21. A printer constituting a data communication system
in which a printer controller and the printer controlled
by the printer controller perform data communication via
15   a communication channel, said printer having a memory in
which driver software is capable of being stored in a
storage area, wherein driver software of a plurality of
types is stored in the storage area of said memory so as
to be capable of being read out based upon control by
20   said printer controller.

22. A data communication system in which a controller
and a controlled device controlled by the controller
perform data communication via a communication channel,
wherein the controlled device is provided with a first
25   memory capable of storing driver software of a plurality
of types, and the controller comprises:

a second memory for storing driver software;

judgement means for judging whether driver software

suitable for the controller has been stored in a
prescribed first storage area of said first memory
provided in said controlled device;

   readout control means for reading driver software
5 suitable for the controller out of the first storage
area in response to a jugement by said judgement means
to the effect that driver software suitable for the
controller has been stored in the first storage area;

   transmission control means for transmitting data,
10 which represents the driver software that has been read
out by said readout control means, from the controlled
device to the controller; and

   storage control means for receiving the data
representing the driver software transmitted by said
15 transmission control means, and storing this data in a
second storage area of said second memory.

23. A controller of a controlled device, the controller
constituting a data communication system in which the
controller and the controlled device controlled by the
20 controller perform data communication via a
communication channel, comprising:

   a memory for storing driver software;

   first judgement means for judging whether driver
software suitable for the controller has been stored in
25 a prescribed first storage area of the controlled
device;

   readout control means, responsive to a judgement by
said first judgement means to the effect that driver

software suitable for the controller has been stored in the first storage area, for reading the driver software out of the first storage area; and

storage control means for storing, in a prescribed
5   second storage area of said memory, data representing the driver software transmitted from the controlled device based upon transmission control by said transmission control means.

24.   A controlled device constituting a data
10   communication system in which a controller and the controlled device controlled by the controller perform data communication via a communication channel, said controlled device having a memory in which driver software is capable of being stored in a storage area,
15   wherein driver software of a plurality of types is stored in the storage area of said memory so as to be capable of being read out based upon control by said controller.

25.   A charging apparatus capable of being connected to
20   a communication apparatus, which is capable of performing data communication via a communication channel, using said communication channel to make the connection;

wherein said communication channel includes a
25   communication line for data communication and a power supply line for supplying electric power;

said apparatus comprising a charging circuit for charging a battery by being supplied with electric power

through said power supply line.

26. The apparatus according to claim 25, further comprising:

charging capability a judgement device for judging,

5   based upon power supplying capability of said communication apparatus, whether charging by said charging circuit is possible or not; and

a charging controller for controlling said charging circuit so as to charge the battery in response to a

10   judgement by said charging capability the judgement device to the effect that charging is possible.

27. The apparatus according to claim 25, further comprising:

a power-drop judgement device for judging, based

15   upon level of electric power supplied from said power supply line, whether a drop in power in said power supply line has occurred owing to charging of the battery by said charging circuit; and

a charging-quantity adjustment device for adjusting

20   said charging circuit, so as to reduce amount of charging, in response to a judgement by said power-drop judgement device to the effect that the drop in power will occur.

28. The apparatus according to claim 25, further

25· comprising a charging data transmitting device for transmitting data, which relates to charging in said charging circuit, to the communication apparatus connected by said communication channel.

29. A charging apparatus capable of being connected to a communication apparatus, which is capable of performing data communication via a communication channel, using said communication channel to make the

5 connection;

wherein said communication channel includes a communication line for data communication and a power supply line for supplying electric power;

said apparatus having a charging circuit for

10 applying electric power, with which it is supplied through said power supply line, to a connector of a data processing unit driven by an installed battery, the data processing unit being formed to have said connector in order to input electric power for charging the battery.

15 30. A method of charging a battery comprising the steps of:

connecting a charging apparatus, which includes a charging circuit, to a communication apparatus capable of performing data communication via a communication

20 channel that includes a communication line for data communication and a power supply line for supplying electric power, the connection being made using said communication channel; and

charging a battery by supplying electric power to

25 said charging circuit through said power supply line.

31. The method according to claim 30, further comprising the steps of:

judging, based upon power supplying capability of

said communication apparatus, whether charging by said

charging circuit is possible or not; and

    charging the battery in response to a judgement to

the effect that charging is possible.

5   32. The method according to claim 30, further

comprising:

    judging, based upon level of electric power

supplied from said power supply line, whether a drop in

power in said power supply line has occurred; and

10   adjusting said charging circuit, so as to reduce

amount of charging, in response to a judgement to the

effect that the drop in power will occur.

33. The method according to claim 30, further

comprising a step of transmitting data, which relates to

15 charging in said charging circuit, to the communication

apparatus connected by said communication channel.

34. A method of charging a battery using a charging

apparatus capable of being connected to a communication

apparatus, which is capable of performing data

20 communication via a communication channel, using this

communication channel to make the connection;

    wherein said communication channel includes a

communication line for data communication and a power

supply line for supplying electric power;

25   said method including applying electric power,

which is supplied through said power supply line, to a

connector of a data processing unit driven by an

installed battery, the data processing unit being formed

Sub
a8

to have said connector in order to input electric power for charging the battery, said battery being charged by the electric power applied.

Add B2>